

1. (Currently Amended) An electrostatic discharge (~~ESD~~) protective structure that protects an integrated semiconductor circuit connected between a first potential bus with a first supply potential (~~VCC~~) and a second potential bus with a second supply potential (~~VSS~~), ~~said~~the electrostatic discharge protective structure comprising:

an electrostatic discharge diode having a first region doped with a first conduction type and a second region doped with a second conduction type, ~~spaced apart from said first region~~;

~~said second region being doped with a second conduction type, wherein~~where ~~said~~the electrostatic discharge protective structure is located between the first and second potential busses and drains off an overvoltage pulse to one of the first and second potential busses, ~~wherein~~where ~~said~~the ~~laterally formed~~ electrostatic discharge diode includes a gate electrode located between ~~said~~the first region and ~~said~~the second region, ~~said~~the first region being separated from ~~said~~the second region by a distance that is equal to a width dimension of the gate electrode, and where ~~said~~the gate electrode and ~~said~~the second region are both directly connected to the second supply potential.

2. (Currently Amended) The electrostatic discharge protective structure of claim 1, ~~wherein~~where ~~said~~the protective structure includes a semiconductor body having a surface in which ~~said~~the first region and ~~said~~the second region are embedded, ~~wherein~~where ~~said~~the first region is connected via a first electrode to the first potential bus, and ~~said~~the second region is connected via a second electrode to the second potential bus.

3. (Currently Amended) The electrostatic discharge protective structure of claim 2,

~~wherein~~where ~~said~~the semiconductor body includes charge carriers of the second conduction type, and ~~said~~the gate electrode and ~~said~~the second electrode are connected to ~~said~~the second potential bus.

4. (Currently Amended) The electrostatic discharge protective structure of claim 2, ~~wherein~~where ~~said~~the semiconductor body includes charge carriers of the first conduction type, and at least one well of the second conduction type is embedded in ~~said~~the semiconductor body, and ~~said~~the first and second regions are embedded in ~~said~~the well.

5. (Currently Amended) The electrostatic discharge protective structure of claim 4, ~~wherein~~where ~~said~~the second region laterally encloses ~~said~~the first region.

6. (Currently Amended) The electrostatic discharge protective structure of claim 4, ~~wherein~~where the integrated semiconductor circuit is configured and arranged as a MOS or CMOS circuit.

7. (Currently Amended) The electrostatic discharge protective structure of claim 2, comprising a gate dielectric that spaces ~~said~~the semiconductor body at a distance from the gate electrode.

8. (Currently Amended) The electrostatic discharge protective structure of claim 7, ~~wherein~~where ~~said~~the gate dielectric contains silicon dioxide and ~~said~~the gate electrode contains polysilicon.

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Currently Amended) An integrated circuit with electrostatic discharge protection, ~~said~~the integrated circuit comprising:

a circuit to be protected; and

an electrostatic discharge device that is disposed electrically parallel to ~~said~~the circuit to be protected between first and second voltage busses, ~~wherein~~where ~~said~~the electrostatic discharge device includes an electrostatic discharge diode including

(i) a first region doped with a first conduction type material within a substrate;

(ii) a second region doped with a second conduction type material within ~~said~~the substrate; and

(iii) a gate electrode having a width W and located between ~~said~~the first and second regions such that ~~said~~the first and second regions are separated by the width W, where ~~said~~the gate electrode and ~~said~~the second region are both directly connected to the same electrical potential.

14. (Currently Amended) The integrated circuit of claim 13, comprising a gate oxide disposed on

~~said~~the substrate between ~~said~~the first and second conduction regions and underlying ~~said~~the gate electrode.

15. (Currently Amended) The integrated circuit of claim 14, comprising a first electrode disposed on ~~said~~the substrate overlaying ~~said~~the first region, and a second electrode disposed on ~~said~~the substrate overlaying ~~said~~the second region, ~~wherein~~where ~~said~~the first electrode is connected to the first voltage bus and ~~said~~the second electrode is connected to ~~said~~the second bus.

16. (Currently Amended) An integrated circuit with electrostatic discharge protection, ~~said~~the integrated circuit comprising:

a circuit to be protected; and

an electrostatic discharge device that is disposed electrically parallel to ~~said~~the circuit to be protected between first and second voltage busses, ~~wherein~~where ~~said~~the electrostatic discharge device includes an electrostatic discharge diode including

(i) a first doped region doped with a first conduction type material within a substrate;

(ii) a first electrode in communication with ~~said~~the first doped region, ~~said~~the first electrode being coupled to the first voltage bus;

(iii) a second doped region doped with a second conduction type material within ~~said~~the substrate;

(iv) a second electrode in communication with ~~said~~the second doped region, ~~said~~the second electrode being ~~coupled~~directly connected to the second voltage bus;

(v) an insulator located between ~~said~~the first and second electrodes, and having an insulator dimension that is equal to the distance between ~~said~~the first and second regions;

and

(vi) a gate electrode in communication with and contiguous with ~~said~~the insulator and having a width equal to the width separating the first doped region and the second doped region, where ~~said~~the gate electrode is also directly connected to ~~said~~the second voltage bus.

17. (Currently Amended) The integrated circuit of claim 16, ~~wherein~~where ~~said~~the insulator includes an oxide.

18. (Currently Amended) The integrated circuit of claim 17, ~~wherein~~where ~~said~~the oxide comprises silicon dioxide.

19. (Currently Amended) The integrated circuit of claim 1, ~~wherein~~where ~~said~~the electrostatic discharge diode is laterally formed.

20. (Currently Amended) The integrated circuit of claim 13, ~~wherein~~where ~~said~~the electrostatic discharge diode is laterally formed.

21. (Currently Amended) The integrated circuit of claim 16, ~~wherein~~where ~~said~~the electrostatic discharge diode is laterally formed.